

APPLICANTS: Dobie *et al.*
SERIAL NO: 10/714,796

DOCKET NO: HTS-0016US.P1 (ISIS.037CP1)

REMARKS

Claims 1, 3-7, 13-19, 23-28, 44-60 and 68-72 were pending. Upon entry of this Amendment, claims 1, 3-7, 13-19, 23-28, 44-60 and 68-76 will be pending.

Claim 1 is amended to specify the antisense compound is at least 75% complementary to the nucleic acid molecule encoding kinesin-like 1 (SEQ ID NO: 3) and for clarity. Claims 59 and 60 are amended to replace "2'-methoxyethyl" with "2'-MOE" to clarify the compound modification, support for which can be found, for example, in paragraphs [0169] and [0196] of the specification. New claims 73-76 find basis, for example, in paragraph [0020] of the specification. No new matter has been added to the claims.

The specification is amended to correct minor typographical and spelling errors. Support for amending "2'-methoxyethyl" to "2'-methoxyethoxy" can be found, for example, in paragraph [0073] of the specification. No new matter has been added to the specification.

The claim amendments should not be construed as abandonment or agreement with the Examiner's position in the Office Action. Applicant reserves the right to file subsequent applications claiming the canceled subject matter.

INFORMATION DISCLOSURE STATEMENTS

Applicants note that reference number 13, listed under "Foreign Patent Documents" on the PTO-1449 form filed with the Information Disclosure Statement of January 20, 2004, has not been initialed by the Examiner. Applicants respectfully request the reference be considered and made of record.

REJECTION UNDER 35 U.S.C. §112, FIRST PARAGRAPH

Claims 50, 59 and 60 are rejected under 35 U.S.C. §112, first paragraph, as allegedly lacking written descriptive support in the application. The Office Action states support for the limitations of the rejected claims, which were added in a preliminary amendment, is not readily apparent from the specification and claims as originally filed. Applicants respectfully traverse this rejection.

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Claim 50 and claim 59 are directed to chimeric oligonucleotides, wherein the chimeric oligonucleotides are gapmers comprising two regions of LNA nucleotides (claim 50), or two regions of 2'-MOE nucleotides (claim 59), flanking a region of 2'-deoxynucleotides. Claim 60 further specifies that the region of 2'-deoxynucleotides consists of ten nucleotides and each region of 2'-MOE nucleotides consists of five nucleotides.

The specification provides a more than adequate description of the antisense compounds as instantly claimed. For example, paragraphs [0073] to [0075] the specification describe 2'-methoxyethoxy (2'-MOE) and Locked Nucleic Acid (LNA) modifications as preferred sugar modifications for the provided antisense compounds. Paragraphs [0080] to [0082] of the specification describe chimeric compounds as having at least two chemically distinct regions and state, "These oligonucleotides typically contain at least one region wherein the oligonucleotide is modified so as to confer upon the oligonucleotide increased resistance to nuclease degradation, increased cellular uptake, increased stability and/or increased binding affinity for the target nucleic acid." The specification further describes in paragraph [0125] how chimeric oligonucleotides include "gapmers" which are oligonucleotides having a "gap" segment positioned between two "wing" segments. As a specific example of a gapmer, the specification describes in Examples 15, 30 and 31, gapmers having a central "gap" region of ten 2'-deoxynucleotides flanked on each side by five 2'-MOE modified nucleotides. Thus, the specification not only provides written descriptive support for the compounds encompassed by claims 50, 59 and 60, it further provides explicit examples of antisense compounds which have a region of 2'-deoxynucleotides flanked by regions of 2'-MOE nucleotides (claims 59 and 60). Further, one of ordinary skill in the art, given the teachings of the specification, would have recognized Applicants to be in possession of chimeric antisense compounds comprising two regions of LNA nucleotides flanking a region of 2'-deoxynucleotides.

Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §112, first paragraph.

REJECTION UNDER 35 U.S.C. §102(e)

Claims 1, 3-7, 13-16, 23, 49-51 and 60 are rejected under 35 U.S.C. §102(e) as allegedly

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being anticipated by Watt *et al.* (U.S. 6,468,796). The Office Action states Watt *et al.* disclose an antisense oligonucleotide (SEQ ID NO: 85) that comprises at least an 8 nucleobase portion of SEQ ID NO: 122. The Office Action further argues Watt *et al.* disclose compounds 20 nucleotides in length, RNA compounds, chimeric compounds, gapmers and various oligonucleotide modifications. Applicants respectfully traverse this rejection.

Claim 1 recites an antisense compound 12 to 50 nucleobases in length targeted to a nucleic acid molecule encoding kinesin-like 1 (SEQ ID NO: 3), wherein said compound comprises at least an 8-nucleobase portion of SEQ ID NO: 122 and is at least 75% complementary to said nucleic acid molecule encoding kinesin-like 1. The remainder of the rejected claims depend directly or indirectly from claim 1.

In contrast to the pending claims, Watt *et al.* disclose an oligonucleotide targeted to bifunctional apoptosis regulator and the oligonucleotide is only 70% complementary (14 of 20 nucleotides) to kinesin-like 1 (SEQ ID NO: 3). Since Watt *et al.* do not teach each and every limitation of the pending claims, the reference does not anticipate the pending claims.

Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §102(e).

ALLOWED CLAIMS AND ALLOWABLE SUBJECT MATTER

Applicants thank the Examiner for noting that claims 70-72 are allowed. Applicants also note claims 68 and 69 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form. Applicants submit claim 1 is currently in condition for allowance, thus claims 68 and 69 are allowable. However, Applicants have amended claim 68 herein to be in independent form, incorporating the limitations of claim 1.

It is believed that no fee is due with this response. However, if a fee is due, the Commissioner is hereby entitled to charge the fee to Deposit Account 50-0252, referencing the above named application.

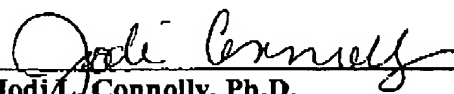
Applicants believe that the foregoing comprises a full and complete response to the Office Action of record. Withdrawal of the pending rejections and reconsideration of the claims

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is respectfully requested. If the Examiner believes that there are any remaining issues in the case that could be resolved by a telephonic interview, the Examiner is encouraged to contact the Agent for Applicants listed below to discuss any outstanding matters.

Respectfully submitted,


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